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EXAMINER
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LEE, CHUN KUAN

ART UNIT	PAPER NUMBER
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2181

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/676,430	<b>Applicant(s)</b> ADL-TABATABAI ET AL.	
	<b>Examiner</b> Chun-Kuan (Mike) Lee	<b>Art Unit</b> 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-16 and 18-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-16 and 18-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

bit, the T bit having fixed 1 bit and the pointer having fixed 25 bit, and because of the fixed length the corresponding offset would be fixed.

Goldberg teaches a data compression system and method comprising dictionary elements (col. 1, ll. 17-40).

As applicant applied similar arguments as presented above for independent claim 1 towards independent claims 7, 23 and 26, the examiner also applied the same response to the independent claims 7, 23 and 26.

3. In response to applicant's arguments, on page 11, 2<sup>nd</sup> paragraph, regarding the rejection of the independent claims 15 rejected under 35 U.S.C. 103(a) that the combination of references does not teach/suggest the claimed limitation of "decompressing each compressed symbol in a compressed block in parallel," because Franaszek teaches the decompression of subblock and not the claimed "symbol;" applicant's arguments have fully been considered, but are not found to be persuasive.

As each of Franaszek's subblock contains the corresponding compressed data, therefore contains the symbol (i.e. compressed data), which is decompressed in parallel (Fig. 3).

As applicant applied similar arguments as presented above for independent claim 15 towards independent claim 19, the examiner also applied the same response to the independent claim 19.

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4. In response to applicant's arguments, on page 11, 3<sup>rd</sup> paragraph, regarding the rejection of the independent claims 15 rejected under 35 U.S.C. 103(a) that the combination of references does not teach/suggest the compressed data block have fix offset because Franaszek's compressed subblock will in general be a different size; applicant's arguments have fully been considered, but are not found to be persuasive.

Franaszek's disclosure of the different size subblock is only one of the embodiments, Franaszek also disclosed that the subblock can have fix size, such as having 128 bytes (col. 1, ll. 39-41); therefore, because of the fixed length compressed data block, the corresponding offset would be fixed.

As applicant applied similar arguments as presented above for independent claim 15 towards independent claim 19, the examiner also applied the same response to the independent claim 19.

## **I. INFORMATION CONCERNING OATH/DECLARATION**

### **Oath/Declaration**

5. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

## **II. INFORMATION CONCERNING DRAWINGS**

### **Drawings**

6. The applicant's drawings submitted are acceptable for examination purposes.

### III. REJECTIONS BASED ON PRIOR ART

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 7, 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tremaine (US Patent 6,775,751) in view of Goldberg (US Patent 7,035,656).
8. As per claims 1, 7, 23 and 26, Tremaine teaches a computer system and method comprising:
  - a central processing unit (CPU) (Fig. 1, ref. 101);
  - a cache memory coupled to the CPU having a plurality of compressible cache lines to store additional data (col. 1, ll. 22-43);
  - receiving a string of data symbols (col. 1, ll. 22-43 and col. 5, ll. 1-11);
  - a register (Fig. 1, ref. 113) to store a plurality of fixed length data symbols to be compressed (col. 5, ll. 1-11);
  - a chipset having a cache controller (Fig. 1, ref. 102), coupled to the CPU (Fig. 1, ref. 101) and the cache memory (col. 1, ll. 22-43), including:
    - compression logic (Fig. 1, ref. 104) to compress each of the plurality of cache lines (data symbols) by compressing the data within a compressed cache line into a

fixed sized compressed data block (compressed data block) having a plurality of compressed symbols (Fig. 2, ref. 204) and translation information (Fig. 2, ref. 207) (col. 5, l. 35 to col. 6, l. 41), wherein the compressed data block obviously would be fixed size in order to be properly placed into the sectors (Fig. 2, ref. 204) such as having fixed 256 byte, the DOC field having fixed 3 bit, the T bit having fixed 1 bit and the pointer having fixed 25 bit;

the compressed symbols (Fig. 2, ref. 204) and translation information (Fig. 2, ref. 207) having a fixed length and fixed offset within the fixed sized compressed data block (compressed data block) (col. 5, l. 35 to col. 6, l. 41 and col. 8, ll. 21-31), wherein the fix length and the fix offset is resulted from the data entries (Fig. 2, ref. 204, 207 and Fig. 3, ref. 301) have fix length such as the sector having 256 byte, the DOC field having 3 bit, the T bit having 1 bit and the pointer having 25 bit, and because of the fix length the corresponding offset would be fixed; and

a main memory (Fig. 1, ref. 103) coupled to the chipset (Fig. 1, ref. 102).

Tremaine does not expressly teach the computer system and method comprising a plurality of dictionary elements and dictionary register.

Goldberg teaches a data compression system and method comprising dictionary elements (col. 1, ll. 17-40), wherein the dictionary elements would obviously be stored into corresponding dictionary registers.

It would have been obvious for one of ordinary skill in this art, at the time of invention was made to include Goldberg's dictionary element into Tremaine's compression system and method for the benefit of optimizing the amount of data being

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transferred by reducing the actual amount of data transferred and enabling more resource for error detection and data correction to obtain the invention as specified in claims 1, 7, 23 and 26.

9. Claims 2-6, 8-9, 11-12, 24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tremaine (US Patent 6,775,751) in view of Goldberg (US Patent 7,035,656) as applied to claims 1, 7, 23 and 26 above, and further in view of Castelli et al. (US Patent 6,847,315).

10. As per claims 2 and 8, Tremaine and Goldberg teach all the limitations of claims 1 and 7 as discussed above, where Tremaine further teaches the compression system and method comprising a first symbol would be compared with the dictionary element (Tremaine, col. 5, ll. 35-49).

Tremaine and Goldberg do not teach the compression system and method comprising dividing a first symbol into a first component and a second component; and comparing the first component with the dictionary elements.

Castelli teaches a data compression system and method comprising a data compressor separating a uncompressed data into a first portion and a second portion, wherein one of the portion is left uncompressed and the other portion is compressed (col. 1, ll. 60-65 and col. 2, ll. 10-18).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Castelli's separation of the uncompressed data into

Tremaine and Goldberg's the compression system and method for the benefit of reducing latency associated with the transferring of compressed data as data is compressed at the transmitter, transmitted in compressed form and decompressed at the receiver (Castelli, col. 1, ll. 57-59). The resulting combination of the references further teaches the compression system and method comprising dividing the uncompressed data (e.g. first symbol) into the first portion (e.g. first component) and the second portion (e.g. second component); and comparing the first component With the dictionary elements.

11. As per claim 3, Tremaine, Goldberg and Castelli teach all the limitations of claim 2 as discussed above, where Tremaine and Castelli further teach the compression system and method further comprising compressing the first component to form a first tag if the first component matches a dictionary element (Tremaine, col. 5, ll. 35-49 and Castelli, Fig. 7 and col. 2, ll. 10-18), such that if the uncompressed data (i.e. first component) matches the dictionary element, the uncompressed data would ~~be encoded~~ be encoded into the compressed state (i.e. first tag).

12. As per claim 4, Tremaine, Goldberg and Castelli teach all the limitations of claim 3 as discussed above, where Tremaine further teaches the compression system and method further comprising wherein each compressed symbol includes a tag to indicate a compression type (e.g. degree of compressibility (DOC)) (Tremaine, col. 8, ll. 29-58).



13. As per claim 5, Tremaine, Goldberg and Castelli teach all the limitations of claim 3 as discussed above, where Goldberg and Castelli further teach the compression system and method further comprising storing the first component at a dictionary element if the first component does not match a dictionary element (Goldberg, col. 1, ll. 31-35 and Castelli, Fig. 7), as the dictionary must also be transmitted along with the compressed data for proper decompressing.

14. As per claim 6, Tremaine, Goldberg and Castelli teach all the limitations of claim 3 as discussed above, where Tremaine and Castelli further teach the compression system and method comprising wherein compressing the data comprises dividing a second symbol into a second component and a second component; and comparing the second component with the dictionary elements (Tremaine, col. 1, ll. 22-43 and col. 5, ll. 1-11 and Castelli, col. 1, ll. 60-65 and col. 2, ll. 10-18), as after compressing the first symbol, the subsequent second symbol is compressed in the similar method.

15. As per claim 9, Tremaine, Goldberg and Castelli teach all the limitations of claim 8 as discussed above, where Tremaine further teaches the compression system and method comprising wherein the first and second components are compressed into fixed length compressed symbol (Tremaine, col. 6, ll. 6-35), as each sector for storing the compressed data and uncompressed data are of fixed size, such as 256 byte

16. As per claim 11, Tremaine, Goldberg and Castelli teach all the limitations of claim 8 as discussed above, where Tremaine and Castelli further teach the compression system and method comprising wherein the first component is received at the compression logic and encoded to form a tag (Tremaine, col. 5, ll. 1-11; col. 5, ll. 35-49 and col. 6, ll. 6-41 and Castelli, Fig. 7), as the first component would obviously be compressed to form the compressed data.

17. As per claim 12, Tremaine, Goldberg and Castelli teach all the limitations of claim 11 as discussed above, where Castelli further teaches the compression system and method comprising a buffer to store the tag and second component of each symbol as the compressed symbol (Castelli, Fig. 7), as the compressed symbol is buffered in the memory.

18. As per claims 24 and 27, Tremaine, Goldberg and Castelli teach all the limitations of claims 23 and 26 as discussed above, where Tremaine further teach the compression system and method comprising wherein the chipset (cache controller) further comprises decompression logic (Tremaine, Fig. 1, ref. 105) to decompress compressed symbols within a compressed data block to generate uncompressed symbols.

19. Claims 13-14 and 25 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Tremaine (US Patent 6,775,751), Goldberg (US Patent 7,035,656) and Castelli et

al. (US Patent 6,847,315) as applied to claims 8 and 24 above, and further in view of Franaszek et al. (US Patent 5,729,228).

20. As per claim 13, Tremaine, Goldberg and Castelli teach all the limitations of claim 8 as discussed above, where Tremaine further teaches the compression system and method comprising wherein the compression logic comprises obviously a no matching logic to determine if the first component has all ones or all zeros (e.g. "all zero" special case) (Tremaine, col. 8, ll. 29-58).

Tremaine, Goldberg and Castelli do not expressly teach the compression system and method comprising dictionary matching logic to determine if the first component matches a dictionary element.

Franaszek teaches a compression system and method comprising a compressor (Fig. 2, ref. 241-244) compressing a corresponding uncompressed sub-block (Fig. 2, ref. 221-224) by matching the corresponding uncompressed sub-block to the dictionary (Fig. 2 and col. 2, l. 48 to col. 3, l. 15).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Franaszek's parallel decompressors into Tremaine, Goldberg and Castelli's compression system and method for the benefit of providing even faster data compression and decompression (Franaszek, col. 1, ll. 36-37). The resulting combination of the references further teaches the compression system and method comprising the compressor (e.g. dictionary matching logic) to compress the

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uncompressed data (e.g. first component) by matching the first component with the dictionary element.

21. As per claim 14, Tremaine, Goldberg, Castelli and Franaszek teach all the limitations of claim 13 as discussed above, where Tremaine and Franaszek further teach the compression system and method comprising wherein the compression logic comprises an encoder coupled to the match logic and the no match logic to encode the first component to form a tag if the first component matches a dictionary element, has all ones or zeroes (Tremaine, col. 8, ll. 29-58 and Franaszek, Fig. 2, ref. 241-244).

22. As per claim 25, Tremaine, Goldberg and Castelli teach all the limitations of claim 24 as discussed above 25.

Tremaine, Goldberg and Castelli do not teach the computer system comprising wherein the decompression logic decompresses the compressed symbols in parallel.

Franaszek teaches a decompression system and method comprising decompressing compressed data in parallel (Fig. 3; col. 1, ll. 36-41 and col. 3, ll. 16-37).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Franaszek's parallel decompression into Tremaine, Goldberg and Castelli's computer system for the benefit of providing even faster data compression and decompression (Franaszek, col. 1, ll. 36-37). The resulting combination of the references further teaches computer system further comprising

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wherein decompression logic decompresses the compressed data (e.g. compressed symbols) in parallel.

23. Claims 15-16, 19 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franaszek et al. (US Patent 5,729,228) in view of Goldberg (US Patent 7,035,656).

24. As per claims 15, 19 and 28, Franaszek teaches a decompression system and method comprising:

a plurality of decompression units (Fig. 3, ref. 341-344) to decompress a corresponding compressed symbol (Fig. 3, ref. 261-264) within a fixed offset compressed data block having a plurality of compressed symbols (Fig. 3, ref. 261-264) having fix length (e.g. 128 bytes) and fix offset to generate an uncompressed symbol (Fig. 3, ref. 220) (col. 1, ll. 039-41 and col. 3, ll. 16-37), wherein the offset would be fixed as the length is fixed;

receiving the fixed offset compressed data block having the plurality of compressed symbols (Fig. 3 and col. 3, ll. 16-37);

the decompression units decompressing each of the compressed symbols in parallel by randomly accessing a first compressed symbol within the fixed offset compressed data block is received (Fig. 3; col. 1, ll. 13-17 and col. 3, ll. 16-37), wherein the randomly access is enabled by the parallelism; and

wherein the parallel decompression of the fixed offset compressed data block is dictionary based (col. 3, ll. 14-37), by:

analyzing a tag component (compressed sub-block 261-264 of Fig 3) within a compressed symbol (compressed block 260 of Fig. 3) (Fig. 3), as each decompressor analyzed the received compressed sub-block for the corresponding matches to the dictionary; and

decompressing the compressed symbol (compressed block 260 of Fig. 3) to form a symbol (uncompressed data block 220 of Fig. 3) based upon the tag value (compressed sub-block 261-264 of Fig 3).

Franaszek does not teach the decompression system and method comprising a plurality of dictionary elements.

Goldberg teaches a data decompression system and method comprising receiving a compressed data having a dictionary element along with the compressed data (col. 1, ll. 17-40).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Goldberg's dictionary element into Franaszek's decompression system and method for the benefit of optimizing the amount of data transferred by reducing the actual amount of data transferred and enabling more resources for error detection and data correction (Goldberg, col. 1, ll. 23-26). The resulting combination of the references further teaches the decompression system and method comprising wherein the received compressed data (e.g. fixed offset compressed data block) having the plurality of dictionary elements.

25. As per claim 16, Franaszek and Goldberg teach all the limitations of claim 15 as discussed above, where Franaszek further teaches the decompression system and method comprising wherein each of the compressed symbols are decompressed simultaneously (Franaszek, col. 1, ll. 36-45 and col. 3, ll. 16-37), wherein the decompression of the compressed symbols would be implemented in parallel, therefore providing the simultaneous decompression of the compressed symbols.

26. As per claim 29, Franaszek and Goldberg teach all the limitations of claim 28 as discussed above, where Franaszek further teaches the decompression system and method comprising wherein decompressing each of the compressed symbols comprises:

analyzing a tag component (Franaszek, compressed sub-block 261-264 of Fig 3) within a compressed symbol (Franaszek, compressed block 260 of Fig. 3) (Franaszek, Fig. 3), as each decompressor analyzed the received compressed sub-block for the corresponding matches to the dictionary; and

decompressing the compressed symbol (Franaszek, compressed block 260 of Fig. 3) to form a symbol (Franaszek, uncompressed data block 220 of Fig. 3) based upon the tag value (Franaszek, compressed sub-block 261-264 of Fig 3).

27. Claims 18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franaszek et al. (US Patent 5,729,228) in view of Goldberg (US Patent 7,035,656)

as applied to claims 10 and 19 above, and further in view of Castelli et al. (US Patent 6,847,315).

28. As per claim 18, Franaszek and Goldberg teach all the limitations of claim 17 as discussed above, where Franaszek further teaches the decompression system and method comprising wherein decompressing, the compressed symbol to form a symbol based upon the tag value (Franaszek, compressed block 260 of Fig. 3) comprises decoding (e.g. decoding by the corresponding decompressor) the tag (Franaszek, compressed block 260 of Fig. 3) to form a matched component of the symbol (Franaszek, uncompressed data block 220 of Fig. 3) (Franaszek, Fig. 3), as the decompressor determine the corresponding match of the compressed sub-block to the dictionary.

Franaszek and Goldberg do not teach the decompression system and method comprising combining the matched component with an unmatched component within the compressed symbol to form the symbol.

Castelli teaches a data compression and decompression system and method comprising a data compressor separating a uncompressed data into a first portion and a second portion, wherein one of the portion is left uncompressed and the other portion is compressed forming a compressed data entry (Fig. 7; col. 1, ll. 60-65 and col. 2, ll. 10-18), therefore it would be necessary, during the decompression of data, to combined the uncompressed potion with the decompressed compressed portion to form the original uncompressed data.



It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Castelli's compressed and compressed data into Franaszek and Goldberg's the decompression system and method for the benefit of reducing latency associated with the transferring of compressed data as data is compressed at the transmitter, transmitted in compressed form and decompressed at the receiver (Castelli, col. 1, ll. 57-59). The resulting combination of the references further teaches the decompression system and method comprising combining the uncompressed data (e.g. unmatched component) within the compressed symbol with the decompressed compressed data (e.g. matched component) to form the original uncompressed data (e.g. symbol).

29. As per claim 20, Franaszek and Goldberg teach all the limitations of claim 19 as discussed above.

Franaszek and Goldberg do not teach the decompression system and method comprising wherein the compressed symbol comprises a tag component and an unmatched symbol component.

Castelli teaches a data compression and decompression system and method comprising a data compressor separating a uncompressed data into a first portion and a second portion, wherein one of the portion is left uncompressed and the other portion is compressed forming a compressed data entry (Fig. 7; col. 1, ll. 60-65 and col. 2, ll. 10-18).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Castelli's compressed and uncompressed data into Franaszek and Goldberg's decompression system and method for the benefit of reducing latency associated with the transferring of compressed data as data is compressed at the transmitter, transmitted in compressed form and decompressed at the receiver (Castelli, col. 1, ll. 57-59). The resulting combination of the references further teaches decompression system and method comprising wherein the compressed symbol comprises the compressed data (e.g. tag component) and the uncompressed data (e.g. unmatched symbol component).

30. As per claim 21, Franaszek, Goldberg and Castelli teach all the limitations of claim 20 as discussed above, where Franaszek further teaches the decompression system and method comprising wherein each decompression unit comprises logic to decode the tag component (e.g. compressed data) of a compressed symbol to generate a matched symbol component (Franaszek, Fig. 3), as the compressed data is properly decompressed.

31. As per claim 22, Franaszek, Goldberg and Castelli teach all the limitations of claim 21 as discussed above, where Franaszek and Castelli further teaches the decompression system and method comprising wherein each decompression unit combines a matched symbol component with the unmatched symbol component to form an uncompressed symbol (Franaszek, Fig. 3 and Castelli, Fig. 7), as the compressed

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data is properly decompressed and combined with the uncompressed data in order to form the original uncompressed data.

#### **IV. CLOSING COMMENTS**

##### **Conclusion**

##### **a. STATUS OF CLAIMS IN THE APPLICATION**

The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. 707.07(i):

##### **a(1) CLAIMS REJECTED IN THE APPLICATION**

Per the instant office action, claims 1-9, 11-16 and 18-29 have received a final action on the merits. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

##### **b. DIRECTION OF FUTURE CORRESPONDENCES**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671. The examiner can normally be reached on 8AM to 5PM.

## DETAILED ACTION

### RESPONSE TO ARGUMENTS

1. Applicant's arguments filed 05/18/2007 have been fully considered but they are not persuasive. Currently, claims 10 and 17 are canceled and claims 1-9, 11-16 and 18-29 are pending for examination.

2. In response to applicant's arguments, on page 9, 2<sup>nd</sup> paragraph, regarding the rejection of the independent claim 1 rejected under 35 U.S.C. 103(a) that the combination of references does not teach/suggest the claimed limitation of "compressed symbols and dictionary elements having a fixed length and fixed offset within a compressed data block;" applicant's arguments have fully been considered, but are not found to be persuasive.

The examiner does not agree with the applicant argument as the combination of references does teach/suggest the above claimed limitation as following:

Tremaine teaches compressed symbols having a fixed length and fixed offset within a compressed data block (Fig. 2; col. 5, l. 35 to col. 6, l. 41 and col. 8, ll. 21-31), as data is compressed by the compressor (Fig. 1, ref. 104) into compressed data block to be transferred into the main memory (Fig. 1, ref. 103), the compressed data block having compressed symbols would have fixed length in order to be properly placed into the sectors (Fig. 2, ref. 204) such as having fixed 256 byte, the DOC field having fixed 3


**IMPORTANT NOTE**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 30, 2007

Chun-Kuan (Mike) Lee  
Examiner  
Art Unit 2181



ALFORD KINDRED  
PRIMARY EXAMINER